<u>IN THE CLAIMS</u>

Please amend the claims as follows:

1. (original) A method of embedding an additional layer of error correction into an error correcting code, wherein information is encoded into code words of said code over a first Galois field and wherein a number of code words are arranged in the columns of a code block comprising a user data sub-block and a parity data sub-block, said method comprising the steps of:

- encoding the rows of at least said user data sub-block separately or in groups using a horizontal error correcting code over a second Galois field larger than said first Galois field to obtain horizontal parities,

- embedding said horizontal parities as additional layer in said error correcting code.

2. (original) A method as claimed in claim 1,
wherein a predetermined number of bits having a predetermined value is added to each symbol of said user data sub-block before encoding the rows of said user-data sub-block.

3. (original) A method as claimed in claim 2,

wherein one or two bits having bit value zero are added to each symbol of said user data sub-block.

4. (original) A method as claimed in claim 1, wherein said code block is a Long Distance Code (LDC) block comprising LDC code words, in particular code words over the first Galois field $GF(2^8)$, arranged in the columns of said LDC block.

5. (original) A method as claimed in claim 4, wherein each row of said user data sub-block is encoded separately using a [306, 304, 3] Reed Solomon code over a Galois field $GF(2^9)$.

6. (original) A method as claimed in claim 4, wherein each row of said user data sub-block is encoded separately using a subspace subcode of a Reed Solomon code, in particular using a subspace subcode of a Reed Solomon code over a Galois field $GF(2^9)$.

7. (original) A method as claimed in claim 4, wherein the rows of said user data sub-block are·encoded in groups of at least two consecutive rows, in particular of three consecutive rows using a Reed Solomon code over a Galois field $GF(2^{10})$.

8. (original) A method as claimed in claim 4,

wherein the rows of said user data sub-block are encoded in groups

of at least two consecutive rows using a subspace subcode of a Reed

Solomon code, in particular in groups of three consecutive rows

using a subspace subcode of a Reed Solomon code over a Galois field

$GF(2^{10})$.

9. (original) A method as claimed in claim 1,

wherein the rows of the complete code block are encoded separately

or in groups.

10. (original) A method as claimed in claim 1,

wherein said horizontal parities are encoded by an additional error

correcting code, in particular by a Burst Indicator Subcode (BIS)

comprising Reed Solomon code words over $GF(2^8)$.

11. (original) A method of decoding an error correcting code into

which an additional layer of error correction is embedded according

to a method of claim 1, wherein information is encoded into code

words of said code over a first Galois field and wherein a number

of code words are arranged in the columns of a code block

comprising a user data sub-block and a parity data sub-block, said method comprising the steps of:

-        extracting said horizontal parities from said error correcting code,

-        decoding the rows of at least said user data sub-block separately or in groups using the horizontal error correcting code, which had been used for encoding in the method of claim 1, over the second Galois field larger than said first Galois field using said horizontal parities.

12.   (original) Apparatus for embedding an additional layer of error correction into an error correcting code, wherein information is encoded into code words of said code over a first Galois field and wherein a number of code words are arranged in the columns of a code block comprising a user data sub-block and a parity data sub-block, comprising:

-        means for encoding the rows of at least said user data sub-block separately or in groups using a horizontal error correcting code over a second Galois field larger than said first Galois field to obtain horizontal parities,

-        means for embedding said horizontal parities as additional layer in said error correcting code.

13. (original) Apparatus for decoding an error correcting code into which an additional layer of error correction is embedded according to a method of claim 1, wherein information is encoded into code words of said code over a first Galois field and wherein a number of code words are arranged in the columns of a code block comprising a user data sub-block and a parity data sub-block, comprising:

- means for extracting said horizontal parities from said error correcting code,

- means for decoding the rows of at least said user data sub-block separately or in groups using the horizontal error correcting code, which had been used for encoding in the method of claim 1, over the second Galois field larger than said first Galois field using said horizontal parities.

14. (original) Storage medium storing data in form of code words of an error correcting code into which an additional layer of error correction is embedded according to a method of claim 1, wherein horizontal parities are embedded as additional layer in said error correcting code and wherein a number of code words of said code are arranged in the columns of a code block comprising a user data sub-block and a parity data sub-block.

15. (original) Signal comprising data in form of code words of an error correcting code into which an additional layer of error correction is embedded according to a method of claim 1, wherein horizontal parities are embedded as additional layer in said error correcting code and wherein a number of code words of said code are arranged in the columns of a code block comprising a user data sub-block and a parity data sub-block.

16. (currently amended) Computer program comprising program code means for causing a computer to implement the steps of the method of claim 1 or 11 when said program is run on a computer.